

REMARKS

Claims 1 - 48 are presently pending. In the above-identified Office Action, the Claims were rejected under 35 U.S.C. §102(b) or (e) and 35 U.S.C. § 103(a) as being unpatentable over Wood, Hounam *et al.*, Hanni *et al.*, Adam *et al.*, Yamashita, or Rozin.

By this Amendment, Applicant has made a minor correction in the Specification, amended Claims 1, 42, 43 and 45 to more clearly define the patentably distinct features thereof and added new Claims 49 – 77.

For the reasons set forth more fully below, Applicant respectfully submits that the subject application properly presents Claims patentable over the prior art. Accordingly, reconsideration, allowance and passage to issue are respectfully requested.

The present invention addresses the need in the art for a more robust, consistent, versatile RF tag capable of transmitting more data than conventional RF tags with a low probability of detection, while using less power. Generally, the inventive system includes a first subsystem for receiving a first electromagnetic signal; a second subsystem for analyzing the electromagnetic signal to identify a format **type** of the received signal and provide data with respect thereto; a third subsystem responsive to the data for synthesizing a second electromagnetic signal, **the second signal being substantially identical to and electrically independent of the first signal**; and a fourth subsystem for automatically transmitting the second electromagnetic signal.

The invention is set forth in Claims of varying scope, of which Claim 1, as amended, is illustrative. Claim 1 now reads as follows:

1. A system for providing an automatic reply to a first electromagnetic signal comprising:
 - first means for receiving said first electromagnetic signal;
 - second means for analyzing said electromagnetic signal to identify a format **type** of the received signal and provide data with respect thereto;
 - third means responsive to said data for synthesizing a second electromagnetic signal, **said second signal being substantially identical to and electrically independent of said first signal**; and
 - fourth means for automatically transmitting said second electromagnetic signal. (Emphasis added.)

None of the references, taken alone or in combination, teaches, discloses or suggests the invention as presently claimed. That is, none of the references, taken alone or in combination, teaches, discloses or suggests a system for providing an automatic reply to electromagnetic signal having means for identifying a format type of the received signal which is used to synthesize a reply which is substantially identical to and electrically independent of said first signal as presently claimed.

Wood purports to teach a communication system with diversity antenna queuing. However, Wood does not teach, show or suggest a system for providing an automatic reply to electromagnetic signal having means for identifying a format type of the received signal which is used to synthesize a reply which is substantially identical to and electrically independent of said first signal as presently claimed.

Hounam *et al.* purport to teach a method and device for locating and identifying objects by means of an encoded transponder. However, Hounam *et al.* do not teach, disclose or suggest a system for providing an automatic reply to electromagnetic signal having means for identifying a format type of the received signal which is used to synthesize a reply which is substantially identical to and electrically independent of said first signal as presently claimed.

Hanni *et al.* purport to teach a friend or foe identification system. However, Hanni *et al.* also fail to teach, disclose or suggest a system for providing an automatic reply to electromagnetic signal having means for identifying a format type of the received signal which is used to synthesize a reply which is substantially identical to and electrically independent of said first signal as presently claimed.

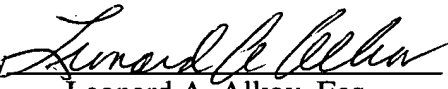
Adam *et al.* purport to teach a method of hardening transmissions between a control station and a transponder. However, Adam *et al.* also fail to teach, disclose or suggest a system for providing an automatic reply to electromagnetic signal having means for identifying a format type of the received signal which is used to synthesize a reply which is substantially identical to and electrically independent of said first signal as presently claimed.

Yamashita purports to teach a vehicle-mounted device with sleep function for use in a road-to-vehicle communication system. However, Yamashita also fails to teach, disclose or suggest a system for providing an automatic reply to electromagnetic signal having means for identifying a format type of the received signal which is used to synthesize a reply which is substantially identical to and electrically independent of said first signal as presently claimed.

Finally, Rozin purports to teach a two-way radio based electronic toll collection method and system. However, Rozin also fails to teach, disclose or suggest a system for providing an automatic reply to electromagnetic signal having means for identifying a format type of the received signal which is used to synthesize a reply which is substantially identical to and electrically independent of said first signal as presently claimed.

Accordingly, Applicant respectfully submits that the presently pending claims properly define an invention patentable over the prior art. Reconsideration, allowance and passage to issue are therefore respectfully requested.

Respectfully submitted,
J. K. Beard

By 
Leonard A. Alkov, Esq.
Attorney for Applicant
Registration No. 30,021

WJB/ns

Leonard A. Alkov, Esq.
Raytheon Company
Corporate Patents and Licensing
~~E07/E17/E150~~ E4/N119
P.O. Box 902
El Segundo, CA 90245-0902

310-647-2577
310-647-2616 (fax)